



CBRN IAC

*Chemical, Biological, Radiological & Nuclear Defense
Information Analysis Center*

Newsletter



Volume 11 Number 3
2010



2010 CBRN Warrior Competition Includes Live Agent Challenges

INDRAC – A Combating Weapons of Mass Destruction (WMD)
Web-based Reference Tool Addressing U.S. Government
Responsibilities, Authorities, and Capabilities

Chemical, Biological, Radiological and Nuclear
(CBRN) Warrant Officer Program

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2010

CHEMICAL AND BIOLOGICAL DEFENSE SCIENCE AND TECHNOLOGY CONFERENCE

15-19 NOVEMBER 2010 — ORLANDO, FLORIDA

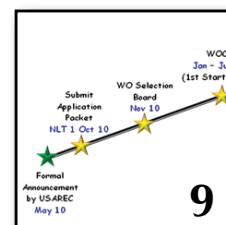
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On the Cover: CBRN Warrior competitors gather the necessary tools in the Chlorine “C” Kit to stop a mock chemical incident. Photo by Kerstin Lopez, FLW Public Affairs Office.

The **CBRNIAC Newsletter**, a quarterly publication of the CBRNIAC, is a public release, unlimited distribution forum for chemical, biological, radiological and nuclear defense information. It is distributed in hardcopy format and posted in Portable Document Format (PDF) on the CBRNIAC Homepage.

The CBRNIAC welcomes unsolicited articles on topics that fall within its mission scope. All articles submitted for publication consideration must be cleared for public release prior to submission. The CBRNIAC reserves the right to reject or edit submissions. For each issue, articles must be received by the following dates:

- First Quarter (Number 1) – October 15th
- Second Quarter (Number 2) – January 15th
- Third Quarter (Number 3) – April 15th
- Fourth Quarter (Number 4) – July 15th

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For further information or assistance, visit or contact the CBRNIAC.

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2010 CBRN Warrior Competition Includes Live Agent Challenges

by Kerstin Lopez and Nicole Black, FLW Public Affairs Office

Fort Leonard Wood hosted the 2010 Best Chemical, Biological, Radiological and Nuclear Warrior Competition, June 14–18. The competition, which determines the CBRN Warrior Team of the Year, kicked off the week prior to the 92nd anniversary of the Chemical Corps Regiment.

Although Fort Leonard Wood has hosted the competition for several years, this year was different. Competitors had never had a challenge like this before, and the entire event was revamped to ensure that all challenges covered the leading-edge operations that CBRN Warriors are expected to know in the current fight, said Capt. Lee Eines, 84th Chem. Bn. operations officer.

The five-day event began with the arrival of 18, two-Soldier teams, with competitors ranging in rank from Private to Sergeant First Class and coming from as far away as Kuwait and Germany.

After arriving and signing in, each competitor had blood drawn, a prerequisite to participate in the week's most critical challenge of conducting sensitive site exploitation (SSE) when live nerve agent is in use, not simulated.

Each Soldier was required to pass the Army Physical Fitness Test (APFT), height and weight criteria, and be certified and medically cleared to perform in a Level A suit. If any team member didn't meet these requirements, that team was disqualified from the remainder of the competition, said Eines. Four teams were disqualified at the start of the competition for not meeting the prerequisites.



Competitors suit up in personal protective equipment at the IRTD where they faced mock chemical incidents and the near 90-degree weather.

Several teams dropped from the competition after the early morning APFT on day one, leaving the remaining 10 teams to fight it out and race against the clock at the physical endurance combat skills course later that morning. Teams were later taken to the Incident Response Training Department (IRTD) to become familiar with the gear they would be utilizing in the following days. This step, though seemingly unimportant, was critical due to the variations in equipment in the field.



Competitors work quickly to contain a mock chemical incident of a leaking pressured railcar at the IRTD.

Over the next two days, teams donned their personal protective equipment to include a Level A suit, self-contained breathing apparatus, and Tingley boots and were challenged on various tasks at the Chemical Defense Training Facility (CDTF) and the IRTD.

The air was thick with tension at the CDTF as teams were evaluated on conducting sensitive site assessments and exploitations, and conducting buddy aid operations in a chemically contaminated environment with live nerve agents. The seriousness of the task resonated with each team member, as they had to undergo a second blood test and a medical screening prior to suiting up and proceeding to the chamber.

Graders conducted multiple checks of the competitor's equipment for this challenge. After all, if not taken seriously, it could turn into a "life or death" situation. This was the first year the competition had this level of technical and tactical operations with the use of live nerve agent.

At the IRTD, teams had to show their knowledge and ability to perform control functions by selecting the appropriate materials and equipment to contain leaks resulting from mock chemical incidents.

The combination of the extreme Missouri heat with Level A suits had teams working quickly to complete all the required tasks and to earn as many points as possible. Eines said competitors wouldn't know where they stand in regard to points accumulated, and they wouldn't receive a pass or fail notice during a task—they simply had to do their best and continue on to the next event.

"Both competitors must complete all tasks in order for the team to earn credit for an event, and competitors will not know who won until the [Green] Dragon Ball," Eines said.

Continued pg. 5



Top left: Teams were timed as they raced through the [Physical Endurance Combat Skills] PECS course on day one. **Top right:** Teams respond to a chemical attack and evacuate the casualty to a Black Hawk helicopter. **Center:** Spc. Christopher Darland and Pfc. Mario Griffin, both 2nd Chem. Bn., Fort Hood, Texas, participate in the mystery task on day five. **Bottom left:** A competitor donned in MOPP Level 4 gear is evaluated on surveying and marking a chemically contaminated area. **Bottom middle:** Pfc. Eric Robinson, 2nd Chem. Bn., Fort Hood, Texas, prepares to navigate to the next station of the proficiency tasks. **Bottom right:** At the IRTD, teams had to demonstrate their ability to place a 55-gallon drum into the over-pack drum.

Land navigation skills were tested on day four as the teams maneuvered through the thicket at Training Area 401 to six proficiency task stations. With temperatures soaring near 90 during the week of the competition, physical and mental endurance along with teamwork was critical to push through.

The competitors were evaluated on the following proficiency tasks: treating a nerve agent casualty, surveying a chemically contaminated area, assembling and performing a function check on weapons systems, decontaminating a vehicle, reacting to an unexploded ordnance in a contaminated area, and conducting a radiological survey.

Day five began with the reflexive fire marksmanship event where teams, equipped with the M4 Carbine rifle and M9 pistol, shot their way through pop-up targets while dragging a 200-plus-pound dummy casualty to safety. Upon completion, teams were then immediately taken to the final challenge—the mystery event. Located in a remote part of Fort Leonard Wood in a mock contamination trailer, teams were given limited time to identify as many possible hazards and make an appropriate judgment of the situation.

This year's challenge primarily emphasized the technical skills of Soldiers with the Military Occupational Specialty code 74D, said Regimental Command Sgt. Maj. Ted Lopez, USACBRN School.

Sgt. John Delarosa, 62nd Chem. Bn., Fort Lewis, Washington, competed in last year's Dragon's Peak competition and said this year's Best CBRN Warrior Competition was very different. It was still very physical, but had a lot more of the technical skills required of the MOS, Delarosa said.

The competition covered a wide range of tasks that CBRN Warriors are relied on for current operations. Eines said the tasks demonstrated the leading edge of what the CBRN Soldier is expected to know. The competition challenged them both tactically and physically and only one team earned the right to say, "We are the best CBRN Warrior Team." ♦

Winners of the 2010 Best CBRN Warrior Competition

(announced June 25, during the Green Dragon Ball)

First Place: **Sgt. 1st Class Luis Sanchez** and **Staff Sgt. Earl Bunn**, 84th Chemical Battalion team, Fort Leonard Wood

Second place: **Sgt. Dickan Collins** and **Spc. Corri Irving**, 23rd Chem. Bn., Fort Lewis, Washington.

Third place: **Sgt. 1st Class Shane Webber** and **Sgt. John Delarosa**, 62nd Chem. Company, Kuwait

INDRAC – A Combating Weapons of Mass Destruction (WMD) Web-based Reference Tool Addressing U.S. Government Responsibilities, Authorities, and Capabilities

By Dr. Greg McIntyre, Applied Research Associates, Inc., and Dr. Stephen Mangino, Defense Threat Reduction Agency and U.S. Strategic Command Center for Combating WMD

The Interagency Combating WMD Database of Responsibilities, Authorities, and Capabilities (INDRAC) system is an interactive strategic-level reference resource database (i.e., “Jane’s for combating WMD”) of U.S. government (USG) Departments and Agencies respective combating WMD (CWMD) responsibilities, authorities and capabilities. A nascent International capabilities reference is also now available. The INDRAC system provides a hierarchical strategic level view of all USG Department and Agency WMD-specific nonproliferation (NP), counterproliferation (CP), and consequence management (CM) responsibilities, authorities and capabilities. A suite of tools enables users to search for and display information—both textually and graphically. An online document library, glossary, user-help, user-feedback and data update tools are available, as well as system-wide statistics on data content, system availability and system usage. It is important to note that INDRAC was not designed as a Global Force Management tool; it does not assess readiness or replace existing tasking processes or procedures. INDRAC serves as a CWMD-specific strategic reference resource to inform operations and serve as an aid to planning, advocacy, training and exercises.

INDRAC is operated by the Defense Threat Reduction Agency and U.S. Strategic Command Center for Combating WMD (DTRA/SCC-WMD). DTRA/SCC-WMD have partnered with Applied Research Associates, Inc. to maintain and continuously improve the utility of this system. INDRAC provides a single source venue to understand USG-wide CWMD NP, CP, and CM capabilities and to enhance interagency coordination and collaboration. INDRAC identifies those USG Departments and Agencies that have the authority, responsibility and capability to protect, deter, defend and/or respond to WMD incidents and related activities. Countering WMD requires a whole of government

approach and INDRAC serves as an enabler to this national mission and strategic objective. The INDRAC project began in June 2006 with system design, development, and data content population of unclassified and classified versions of the systems that were brought online in January 2008. A key milestone was gaining the endorsement, guidance and direction in October 2008 of the U.S. National Security Council for INDRAC’s use by all USG Departments and Agencies as the USG CWMD reference resource system.

What is an INDRAC Record?

In a nutshell, INDRAC is built around an organizational record. That is, all of INDRAC’s data content and associated functionality—searching, mapping, editing tools, etc.—are based on data contained in each of approximately 1900 individual INDRAC organization records. A record includes authorities that assign CWMD responsibilities to the organization, what those responsibilities are, and what CWMD capabilities the organization has to fulfill its responsibilities (Figure 1).

Authorities

Responsibilities

Capabilities
(Activities and Equipment)

Capabilities mapped to:

CWMD Pillars
CWMD Mission Areas
CBRN Threat
Keywords

INDRAC
Interagency Combating WMD Database of Responsibilities, Authorities, and Capabilities

APHIS

Name: (U) APHIS Emergency Operations Center
Acronym: (U) AEOC

Interagency Organization
Validation: March 2010

Details | Points of Contact | Authorities | Responsibilities | Capabilities | Hierarchy | View All

Description: (U) The APHIS Emergency Operations Center (AEOC) is the primary national hub for animal, plant, and all hazard incident operation, communications, and information dissemination pertaining to agricultural emergency incident management. Located at the APHIS HQ facility in Riverdale, MD, the AEOC integrates and provides overall monitoring and operations support during an emergency and serves as the Secretary of Agriculture's primary point of coordination.

Military or Civilian: (U) Civilian

Team Name: (U) HSOC

Affiliated Organizations: (U) (U) Department of Agriculture
(U) Animal and Plant Health Inspection Service

Parent Agency: (U) Chemical
(U) Biological

Mission Areas: Passive Defense
WMD Consequence Management

Home Location: 38 Deg 58 Min 15.59 Sec N
76 Deg 55 Min 40.08 Sec W
COMUS
NOT in NARCL Database

Location: NOT in NARCL Database

In NARCL Database: (U) Area of Responsibility: (U) Method of Activation: (U) Public Website: (U) Secure Website: (U) Notes: (U)

http://www.aphis.usda.gov/emergency_response/emerg_mgmt_aeoc.shtml

Figure 1. Example INDRAC organization record and content as contained within 5 principal tabs: Details (shown above), Points of Contact, Authorities, Responsibilities and Capabilities – both activities and equipment – are mapped to CWMD Pillars, Mission Areas, CBRN threats, and Keywords.

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Figure 2. U.S. Government-wide Combating WMD (CWMD) responsibilities, authorities and capabilities are categorized by the 3 pillars of the National Strategy to CWMD and by the 8 DoD missions of the National Military Strategy to CWMD.

Capabilities are categorized as either activities (e.g., patient decontamination) or equipment (e.g., toxic identifier) and with keywords (e.g., HAZMAT decontamination, medical surge, etc.). All capabilities are mapped to the three pillars (NP, CP or CM), to the eight military CWMD missions, to the chemical, biological, radiological or nuclear (CBRN) threats addressed, and to keywords (Figure 2). Also included are multiple points of contact and links for additional information.

The INDRAC team works with all Departments and Agencies to populate and validate their respective CWMD information on an annual basis (data pull), and in the interim, individual organizations can provide additional updates or changes at any time (data push). All data is managed by a review process conducted by the INDRAC team and the given organization, and upon completion the INDRAC team commits the changes to the database. Individual records have a validation date displayed, and aggregate overall data content statistics by Department or Agency as well as other metrics are also posted on-line.

Features and Functionality

Organization records are displayed in hierarchical views that map a Department or Agency (e.g., Department of Energy or Environmental Protection Agency) to the three pillars, eight mission areas, and to the CBRN threats addressed. Where there is a “blue dot,” that department or agency has a capability that addresses that mission and threat. Users can find a particular organizational record by several means. First is via the hierarchical views or via guided Advanced Search tools (Figure 3). Searches can be constrained by department/agency, threat, mission, pillar, capability and keywords. Alternatively, users may geographically find organizations using search and display features in the Map tools. Other features include online editing, a CWMD-specific glossary and document library categorized by type (e.g., public law, agency regulations, etc.), site statistics, what’s new, user feedback, and online help. In addition to the USG Interagency data online, we are working a multi-year effort to catalogue International CBRN-specific capabilities that can be found under the new “International Tab”.

Search by:

- Organization
- Capabilities
- Authorities

Filter by:

- Agency
- Threat
- Pillars
- MMA
- MSOs

Figure 3. Example of accessing INDRAC’s Advanced Search Tool: Users can query the database by Organization, Capability or Authority; restrict their search by Agency, Branch, Component, CBRN threat, Pillars (NP, CP, or CM), Strategic Objectives, the 8 DoD CWMD mission area(s), by activity or equipment, and by keywords.

A variety of statistics posted online in the Site Statistics tab to address system availability, usage, and content. Currently, INDRAC has approximately 2,600 USG registered users, and approximately 1,900 organizational records.

Over 90% of the data is validated by subject matter experts within each USG Department and Agency. Figure 4 shows a summary of the validation status of USG (non-DoD) and Department of Defense data records.

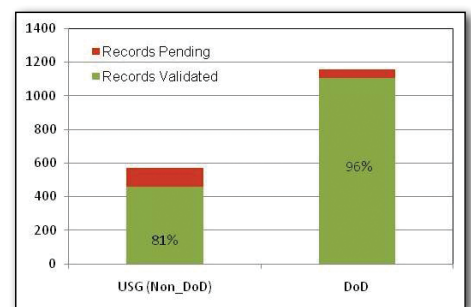


Figure 4. As of July 2010, 91% of all INDRAC data are validated with approximately 81% of the U.S. Government (Non-DoD) information and 96% of the Department of Defense records validated.

Access and INDRAC Points of Contact

The INDRAC team works continuously to improve and enhance the data content and functionality of this system. For further information they can be contacted online at INDRAC-Team@dtra.mil or INDRAC-Team@dtra.smil.mil. The INDRAC system can be accessed via <http://indrac.dtra.mil> and <https://indrac.dtra.smil.mil>.



Contract Awards

ZBV Military Trailers

American Science and Engineering, Inc.

Billerica, MA

\$6,700,000

June 28, 2010

By U.S. Government, Washington, DC

Phases II/II of the Defense Advanced Research Projects Agency's Panoptic Analysis of Chemical Traces Program

SRI International

Menlo Park, CA

\$9,036,694

June 24, 2010

By Defense Advanced Research Projects Agency, Arlington, VA

Parcel C Radiological Remediation and Support at Hunters Point Shipyard

Tetra Tech EC, Inc.

San Diego, CA

\$11,494,845

June 23, 2010

By Naval Facilities Engineering Command Southwest, San Diego, CA

Joint Services Transportable Decontamination System

DRS Environmental Systems, Inc.

Florence, KY

\$14,446,206

June 23, 2010

By U.S. Army Research Development & Engineering Command,

Contracting Center Natick Contracting Division, Natick, MA

Therapeutic Countermeasures Against Centers for Disease Control and Prevention Category A and B Threat Agents

Drexel University

Philadelphia, PA

\$6,649,572

June 21, 2010

By Defense Threat Reduction Agency, Fort Belvoir, VA

Advanced Technology Demonstration (ATD)—Hazard Mitigation Material and Equipment Restoration (HaMMER) and Rapid Area Sensitive Site Reconnaissance (RASR) Programs

ICx Technologies, Inc.

Arlington, VA

\$9,100,000

June 17, 2010

By Defense Threat Reduction Agency, Fort Belvoir, VA

Intelligent Image Analysis System

IntelliScience Corporation

Boise, ID

\$16,600,000

June 16, 2010

By Defense Threat Reduction Agency, Fort Belvoir, VA

Develop and Test New, Small Molecule Compounds for Use as Antidotes to Chemical Warfare Agents

Southwest Research Institute

San Antonio, TX

\$1,890,000

June 6, 2010

By Defense Threat Reduction Agency, Fort Belvoir, VA

Technology Assessments; Situational Awareness; Systems Integration; Engineering Test and Evaluation; Acquisition; Logistics; Training; Information Management; and Program Management of Chemical, Biological, Radiological, and Nuclear Explosives Defense Systems

Battelle Memorial Institute

Columbus, OH

\$8,254,699

June 2, 2010

By 55 CONS/LGCD, Offutt Air Force Base, NE

Provide Business and Analytical Support to the Joint Program Executive Office for Chemical and Biological Defense's Transformational Medical Technologies Initiative Program

Booz Allen Hamilton, Inc.

McLean, VA

\$9,476,595

June 2, 2010

By U.S. Marine Corps System Command, Quantico, VA

Protective Masks

Avox Systems, Inc.

Lancaster, NY

\$7,012,454

May 28, 2010

By U.S. Army Acquisition Center, Aberdeen Proving Ground, MD



CBRNIAC
Chemical, Biological, Radiological & Nuclear Defense
Information Analysis Center

**Serving the CBRN Defense and
Homeland Security communities**

Chemical, Biological, Radiological and Nuclear (CBRN) Warrant Officer Program



By MAJ Tammy R. Alatorre

The Chemical Corps' mission continues to evolve from a conventional CBRN passive defense role to encompassing the full spectrum of operations including Consequence Management (CM), Weapons of Mass Destruction (WMD) elimination, toxic industrial chemical/materials (TICs/TIMs), and radiological hazards. The rapid increase in the Chemical Corps' technical requirements created challenges for the development of new lieutenants. Unit expectations for these new Battalion CBRN officers would shift from combined arms tactics and leadership advisor to technical expert for all new technologies being developed and fielded to support the expanding missions.

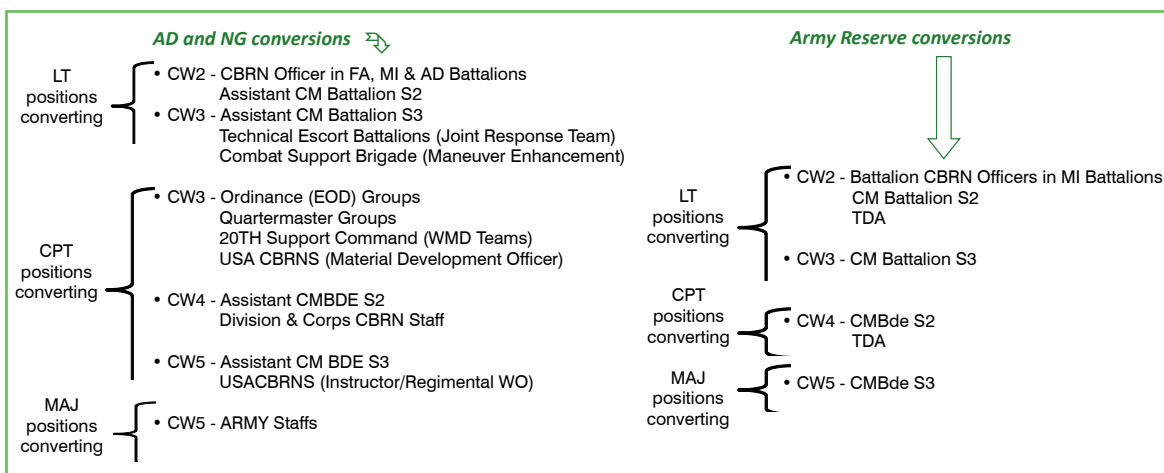
To bridge the technical gap, the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) proposed to create a CBRN Warrant Officer (WO) Military Occupational Specialty (MOS). CBRN WOs will provide the Army with the CBRN technical experience at all levels of command on existing equipment and new technologies. To create a CBRN WO program, the USACBRNS proposed the conversion of certain CBRN officer authorizations in exchange for CBRN WO positions. This allows the Chemical Corps to maintain a professional development model for officers while concurrently creating the same for WOs.

Implementing the CBRN WO program requires the Chemical officer branch to convert 13% of its positions to WO positions, ultimately decreasing the number of Branch Detail officers accessed by 30–50%. These officer conversions apply to all three components: Active Duty (AD), National Guard (NG) and Army Reserve (AR). The adjustment provides an increased opportunity for many CBRN lieutenants to serve in platoon leader positions that previously were filled by branch detail officers.

Over the five-year implantation period (FY10–FY15), converted AD and NG lieutenant positions impact both non-Chemical (CM) and CM organizations. Beginning FY11, Field Artillery, Air Defense Artillery, and Military Intelligence battalions will receive their first CW2 CBRN WO replacing the Battalion CBRN Officer position. CM battalions also experience this conversion in the Assistant S2 position. The career progression and developmental plan for CBRN WO3s–WO5s include positions in Ordinance Explosive Ordinance Disposal (EOD) and Quartermaster Groups, Tech Escort Battalions, Combat Support Brigade (Maneuver Enhancement) (CSB (ME)), CM Brigades, Division, Corps, Army Staffs and the USACBRN School.

USAR LT conversions take a slightly different implementation plan, which impacts both CM TOE and Table of Distribution and Allowances (TDA) organizations in FY11. Career plans for USAR CBRN WO will predominately remain in CM organizations. However there are USAR CBRN WO3s–WO5s advisory positions in Quartermaster Groups, Maneuver Enhanced Brigades (MEB), and TDA organizations including: Mission Support Element (MSE), Medical Commands, Command Augmentation Element, U.S. Army Pacific Command (USARPAC) and U.S. Army Reserve Command (USARC).

Currently, Heavy Brigade Combat Team (HBCT), Infantry Brigade Combat Team (IBCT), Special Forces and Aviation battalions, CM companies, Stryker Brigade Combat Teams (SBCT) and Brigade Combat Team (BCT) Recon Platoons are not projected to convert any of their CBRN LT positions to WO.



The release of the Army official announcement is scheduled for May 2010. Interested Soldiers have six months to prepare their WO packets for a NLT 1 October 2010 submission to the WO selection board, www.usarec.army.mil/warrent. USACBRNS Personnel Development Office (PDO), with ARNG and USAR Deputy Assistant Commandants (DAC) screen each WO packet; validate the qualifications and forward, if waivers are needed, to external agencies. Once validation and waivers are completed, the WO packets are ready for the November 2010 WO Selection Board.

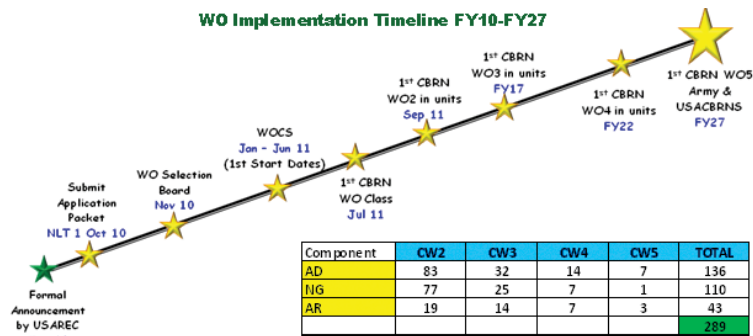
The first joint CBRN WO class begins July 2011. Both Marine and Army Chemical warrant officers will undergo the same nine-week training program at Fort Leonard Wood, Missouri. The CBRN Directorate of Training and Leader Development (DOT & LD) worked closely with the Marine CBRN WO manager verifying Program of Instructions (POI) so as to meet the demands of emerging CBRN technologies.

Continued pg. 10

Warrant Officer Program *cont.*

Projected full Army integration in FY27 encompasses a total combined Army CBRN WO strength of 289 and the development of the first CW5s.

WO Implementation Timeline FY10-FY27



The minimum prerequisite for a Soldier applying is less than 12 years Active Federal Service (AFS) on a DA Form 61 signed, be a US Citizen and have graduated high school or have a GED.

Active and Reserve Components:

- Be a SSG (E6) or above and graduated from MOS 74D BNCOC (*not waiverable*).
- Hold MOS 74D with a minimum of 5 years experience in the MOS. Recruiter, Drill Sergeant and other non-technical duties are not considered MOS experience.
- Base line score of 100 for the ST. (*not waiverable*)
- Must have one year documented Squad Leader experience in a Chemical Squad or one year documented experience as a CBRN NCO at battalion level or higher. (*active component only*)
- OPMF Hard Copies of NCOERS and AERS (1059s) in order of newest to oldest for the last 10 years. The majority of the NCOERS must reflect outstanding and exceptional duty performance ratings noted with "among the best" ratings by the Rater and "successful" and "superior" ratings by the Senior Rater. Applicant must provide one NCOER as a SSG.
- Soldiers must be fully deployable, able to meet all physical requirements IAW AR 40-501, be able to take and pass an approved APFT IAW FM-21-20 (standard or alternate), and meet height/weight standards IAW AR 600.
- Soldiers may request a waiver to take the Alternate Event APFT for entrance in to Warrant Officer Candidate Program.
- Company Commander Letter of Recommendation (or applicable Company Grade UCMJ authority).
- Battalion Commander Letter of Recommendation (or applicable Field Grade UCMJ authority).

a. Additional requirements for Reserve Component:

- Have 18 months leadership experience supervising Soldiers documented on NCOERS.
- Attend the 740A WOBC within 2 years from selection date for federal certification.

b. Preferred qualifications:

- Have two years in a supervisory position documented by NCOERS. (*active component only*)

- One year documented Squad Leader experience in a Chemical Squad or one year documented experience as a CBRN NCO at battalion level or higher. (*reserve component only*)
- Have an associate's degree or greater in a math/science/engineering academic major.

Each WO nomination packet requires basic application information and supporting documentation. AD and RC Soldiers can view the applications process at the following links: www.usarec.army.mil/ng/warrant/WOoverview.html (AD); www.nationalguard.com/fq/#warrantofficer (NG); and www.usarc.army.mil/retn/RTD/wooverview.htm (USAR).

Each WO nomination packet requires basic application information and supporting documentation. Standard submission requirements are provided to the right:

Board Packet

- Checklist (MILPO/PSB Letter or S-1)
- DA Form 61 (HT/WT & APFT Statement)
- Letters of Recommendation
- Resume
- ERB (Enlisted Record Brief)
- OMPF (New 10 Years of NCOERS and/or AERS in order newest to oldest)
- College Transcripts
- DA Form 6256 (AFAST Form from Test Center) This form is for MOS 153A only)
- Official Photo

Supporting Documents

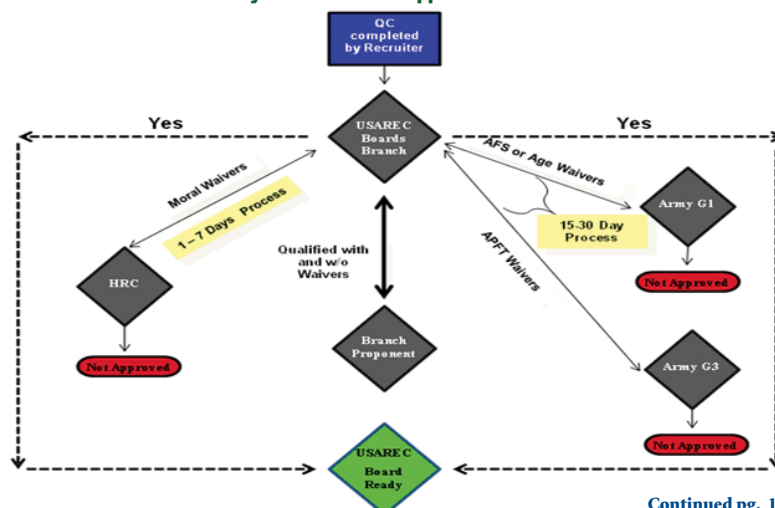
- Security Clearance JPAS Print out
- Physical (USAREC Form 1932)
- DA Form 160-R (Application for Active Duty)
- Statement of Understanding
- Waivers
 - Moral-HRC
 - Prerequisite, -Proponent
 - Age, and AFS - G-1
 - APFT - G3
- Conditional Release

AD Soldiers interested in submitting an application must first contact their local recruiter for the WO packet submission. Recruiters forward all completed packets to USAREC Board Branch for screening and forwarding as required, to appropriate agencies if waivers needed. Consider submitting early if waivers are required to allow for processing time. Moral waivers process through HRC and require 1 to 7 days for a determination. Army G1 processes all Active Federal Service (AFS) and Age waivers, while Army G3 convenes on APFT waivers. Both agencies require a 15–30 day processing time. Additionally, packets are directed through CBRN proponent for validation of branch requirements.

Line Legend

- USAREC/ARCD forwards ALL completed WO packets to Board
- Branch Proponent validates ALL packets
- Waiver routing

Active Duty Warrant Officer Application Process



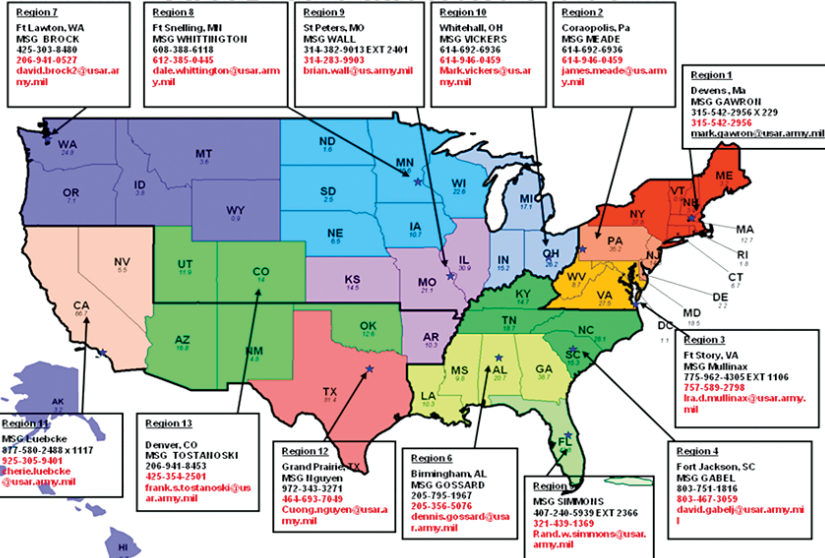
Continued pg. 11

Warrant Officer Program *cont.*

Once branch validation and waivers, as required, are approved, the completed WO packet then is USAREC board ready.

USAR submission process is slightly different. The first step is to contact the Army Reserve Career Division Special Missions (ARCD SPC) Accessions Career Counselor (ACC). Below are the ARCD SPC points of contact by region:

ARCD SPC Missions POCs



For more information about the CBRN WO program you can visit Chemical Knowledge Network website at http://www.wood.army.mil/wood_cms/usacbrns.shtml or contact the CBRN Personnel Development Office (PDO):

PDO Chief

MAJ Tammy R. Alatorre (573) 563-7691
tammy.russo@us.army.mil

PDO SGM

SGM Gwendolyne Evans
(573) 563-3637
gwendolyne.evans@us.army.mil

Analyst

Mr. Thomas Crow
(573) 563-7723
thomas.crow@us.army.mil

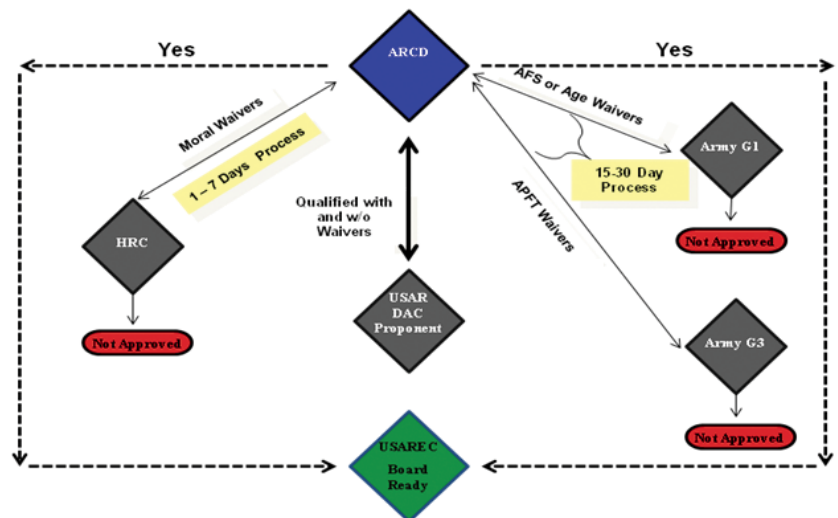
ARCD SPC ACC forwards all completed packets to USAREC Board Branch for screening and forwarding as required, to appropriate agencies if waivers needed. Waivers follow the same submission process and timeline as AD Soldiers. However, packets are directed through the CBRN DAC for USAR branch requirement validation. Once branch validation and waivers (if required) are approved, the completed WO packet then is USAREC board ready.

NG WO submission process goes through individual states. Interested NG Soldiers first contact their state WO strength manager (SM). The state WO SM receives all completed WO packets then forwards packets to the CBRN NG DAC for validation of branch qualification. If the Soldier's packet is validated, the ARNG DAC sends the packet back to the state WO SM for waiver processing.

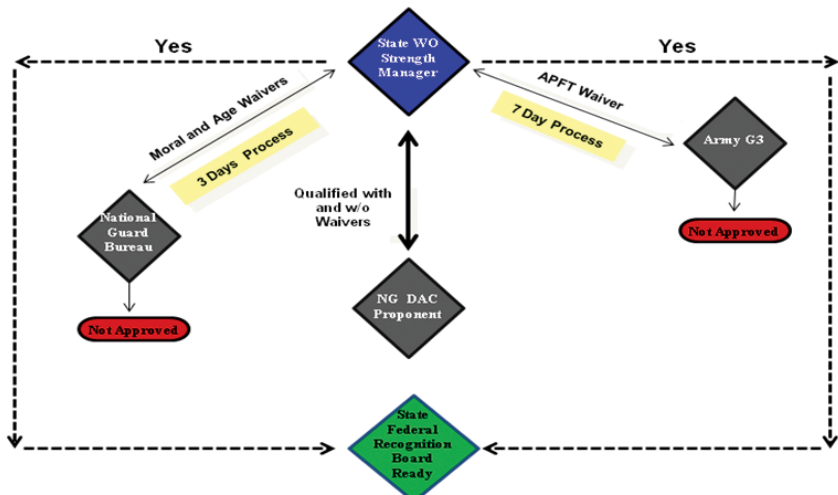
Much like USAR and AD, APFT waivers are forwarded to the Army G3. However, age and moral waivers route to the National Guard Bureau. The state WO SM finalizes WO packet with waivers, if needed, and sends to the State Federal Recognition Board (FRB). Each state has different guidelines as to how often they hold warrant officer FRBs. State WO SMs can provide FRB schedules.

Currently, only nine states and all U.S. Territories are not authorized CBRN WO positions. Those nine states include Alaska, Nevada, Arizona, Montana, New Mexico, Delaware, Virginia, Maine and Connecticut. ❖

Army Reserve Warrant Officer Application Process



National Guard Warrant Officer Application Process





CBRNIAC

*Chemical, Biological, Radiological & Nuclear Defense
Information Analysis Center*

**“A Department of Defense Information Analysis Center—
The Premier Resource for Authoritative CBRN Defense
and Homeland Security Scientific and Technical Information”**



Calendar of Events

Do you have a CBRN Defense or Homeland Security course or event to add to our Calendar? Submit the pertinent information via email to cbrniac@battelle.org. The CBRNIAC reserves the right to reject submissions. For a more extensive list of events, view our online calendar at <https://www.cbrniac.apgea.army.mil/Products/Events/Pages/default.aspx>.

- | | |
|---|--|
| <p>Aug 29–Sep 3 COURSE: Medical Management of Chemical and Biological Casualties
Ft. Detrick and Aberdeen Proving Ground, MD
https://ccc.apgea.army.mil/courses/in_house/BrochureMCBC.htm</p> | <p>Sep 8–Aug 9 Terrorism and New Media: Building a Research Network
Dublin, Ireland
http://www.dcu.ie/~cis/TNM/index.html</p> |
| <p>Aug 30–Sep 3 2010 Homeland Security Conference
Monterey, CA
http://homelandsecurityprogramcommittee.com/</p> | <p>Sep 8–9 JPEO-CBD APBI
National Harbor, MD
http://www.ndia.org/meetings/0370/Pages/default.aspx</p> |
| <p>Sep 6–8 The Eighth International Symposium on Biological Monitoring in Occupational and Environmental Health (ISBM 2010)
Espoo, Finland
http://www.ttl.fi/en/international/conferences/isbm_2010/pages/default.aspx</p> | <p>Sep 10 Defense Forum Washington
Washington, DC
http://www.usni.org/conferences/details.asp?ID=50</p> |
| | <p>Sep 12–15 AHMP 2010 National Conference
Atlanta, GA
http://www.ahmpnet.org/sites/conf/atlanta2010/</p> |

4th National Bio-Threat Conference

The Department of Defense's Joint Program Executive Office for Chemical and Biological Defense, Chemical Biological Medical Systems, Joint Project Manager Guardian, and Technical Support Working Group, the Department of Homeland Security, and the Environmental Protection Agency have organized the Fourth National Bio-Threat Conference to provide a forum for dialogue between government, industry, academia, and first responders to address critical issues in environmental sampling and bio-detection as well as special focus sessions on biosurveillance and microbial forensics.

For additional information:
info@sampling-conference.com
(410) 297-2300
www.sampling-conference.com

Why attend?

A critical component of combating the biological threat is to ensure that our Warfighters, first responders, and laboratory technicians are prepared and equipped.

- First responders from military and civil defense can exchange techniques, ideas, and lessons learned
- Industry professionals will demonstrate new and innovative equipment and methodologies
- Leaders in the sampling and detection communities can exchange strategies for defending our homeland



December 7-9, 2010

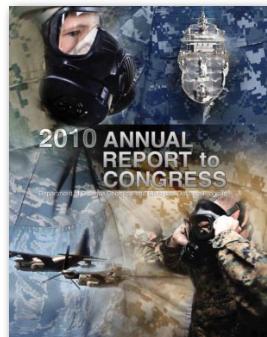
New Orleans



New CBRNIAC Information Resources

Department of Defense Joint Chemical and Biological Defense Program 2010 Annual Report to Congress., Washington, DC: U.S. Department of Defense, 2010.

<http://www.acq.osd.mil/cp/cbdreports/cbdpreporttocongress2010.pdf>



"The 2010 CBDP Annual Report to Congress ...describes the progress made by the DoD to protect the Warfighter, the United States, and its allies from the recognized threat or actual use of weapons of mass destruction (WMD), and outlines achievements, initiatives, and innovations undertaken to identify and balance investment priorities against WMD-associated risks over time." *(Introduction)*

CB-131429

Department of Defense Chemical and Biological Defense Program
1400 Defense Pentagon
Washington, DC 20301-1400
Phone: (703) 571-3343

2010 Department of Defense Chemical and Biological Defense Program Portfolio. Washington, DC: U.S. Department of Defense, 2010.

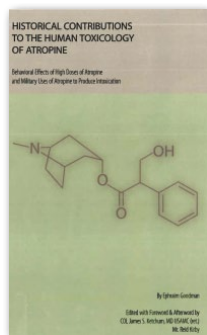
<http://www.jpeocbd.osd.mil/packs/Default2.aspx?pg=0>

"The Chemical and Biological Defense Program (CBDP) supports the nation's overall strategy for combating, defending against, and minimizing the effects of WMD use against U.S. interests and allies. The CBDP provides essential integrated, coordinated, and sustainable CBRN materiel and non-materiel solutions to the Warfighter." *(Introduction)*



CB-131427

Program Analysis and Integration Office
Attn: DAPR-FDB-PAI
E5101, Room 261
E5183 Blackhawk Road
Aberdeen Proving Ground, MD 21010-5424
Phone: (410) 278-0002



Goodman, Ephraim. **Historical Contributions to the Human Toxicology of Atropine: Behavioral Effects of High Doses of Atropine and Military Uses of Atropine to Produce Intoxication.** 1962. Reprint, Wentzville, Missouri: Eximdyne, 2010.

"This monograph reviews selected aspects of the clinical syndrome produced by atropine intoxication with particular reference to behavioral disturbances manifested therein..."

an historical summary of the military applications of the behavioral toxicology of atropine is presented with an Afterword on later research on atropine-related military incapacitants."

CB-129967

ISBN 978-0-9677264-3-4

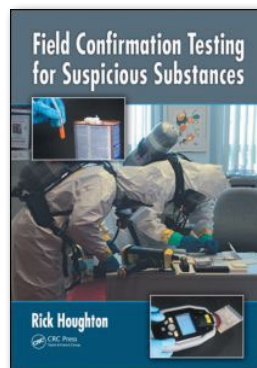
Eximdyne

2208 Autumn Trace Parkway

Wentzville, MO 63385

Phone: (314) 324-0997

Houghton, Rick. **Field Confirmation Testing for Suspicious Substances.** Boca Raton, Florida: CRC Press 2009.



"Frequently a substance found at a port of entry [or other site]...will be labeled and purportedly identified. But law enforcement and other first responders cannot take this claim at face value... [This book] provides those who confront suspicious substances with the tools to confirm or deny a labeled identity." *(Back Cover)*

CB-088885

ISBN 978-1-4200-8615-7

CRC Press

Taylor & Francis Group

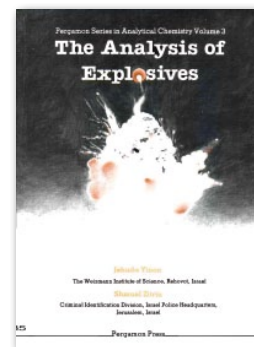
6000 Broken Sound Parkway NW, Suite 300

Boca Raton, FL 33487-2742

Phone: 800-272-7737

Yinon, Jehuda and Shmuel Zitrin. **The Analysis of Explosives.** Elmsford, New York: Pergamon Press Inc., 1981.

"Presenting an overview of all the various methods and techniques, [this book] describes the principles of the different analytical methods, how these methods are used for the analysis of explosives and reviews the major analytical work which has been carried out in this field." *(Back Cover)*



CB-082635

ISBN 0-08-023845-9

Elsevier

3251 Riverport Lane

Maryland Heights, MO 63043

Phone: 800-545-2522

Liberty RadEx Drill Helps Nation Prepare for ‘Dirty Bomb’ Scenario

EPA scientists helped plan and support major simulation of testing, cleanup, and recovery phases following a deliberate radiation attack.

On the night of May 1, 2010, a crude car bomb rigged from gasoline, firecrackers, and alarm clocks was discovered smoldering in the heart of New York City’s Times Square. Fortunately, the bomb never exploded. Instead of mass casualties, the failed terrorist attack provided another chilling example of the critical need for continued vigilance in homeland security activities.



Not more than three weeks before the failed car bomb, experts from the U.S. Environmental Protection Agency (EPA) led an extensive training exercise for responding to a terrorist attack. Officials from a host of different government agencies and private companies prepared for the detonation of a “dirty bomb” containing radiological materials. Such an event would lead to widespread contamination, disruption, and fear.

Sponsored and designed by EPA, “The National Tier 2 Full-Scale Radiological Dispersion Device Exercise”—named Liberty RadEx—was a national drill to practice and test federal, state, and local assessment and cleanup capabilities in the aftermath of a dirty bomb,” a radiological dispersion device incident,” in an urban environment.

Various Presidential Directives following the terrorist attacks of September 11, 2001 and the subsequent issuance of the National Response Framework confirmed EPA’s historic and regulatory role as the federal agency responsible for leading the assessment, mitigation, and cleanup of hazardous materials, including weapons of mass destruction, following a terrorist attack.

The Agency established a homeland security research program to develop and deliver reliable, responsive expertise and products based on scientific research and technology evaluations for hazardous materials and for EPA’s drinking water protection responsibilities.

EPA scientists and engineers were intimately involved in the planning and execution of the Liberty RadEx drill to ensure that the latest research and technology would be available to all participants. For more than a year, EPA researchers participated in multi-agency workgroups to help define the critical, long-term issues that would have to be addressed during the aftermath of a dirty bomb explosion.

“In the aftermath of a dirty bomb attack, it is critically important for local officials and communities to have access to the best available science and expertise,” explains Bill Steuteville, EPA Region 3 Homeland Security Coordinator and one of the Exercise Directors for Liberty RadEx. “EPA has such expertise and capabilities and is one of the lead federal agencies working on homeland security research. Liberty RadEx was a great opportunity to work with our state and local partners to demonstrate EPA’s capabilities and the latest detection and cleanup technologies in order to protect the public and help the community efficiently and effectively.”

The scenario in the Liberty RadEx exercise was built around the likely aftermath of a suicide attack launched from a van loaded with 3,000 pounds of ammonium nitrate mixed with diesel fuel and radioactive Cesium-137.

More than 1,000 participants, representing federal, state, and local agencies, as well as private citizens and companies, were involved. Field drills and training exercises took place April 27 to 29, 2010 in and around Philadelphia, Pennsylvania.

During the Liberty RadEx exercise, EPA scientists and engineers served as “controllers,” providing expertise and technical support. They also helped challenge participants by adding scientifically-based complexities known as “injects” (such as sudden changes in the situation or the discovery of new information) to the simulations and exercises, creating better learning experiences based on the risks and challenges that might unfold during a real radiological event.



Continued pg. 16

RadEx Drill *cont.*

The drill provided a real-world opportunity to apply and demonstrate cleanup technologies that had previously been tested primarily in EPA's research laboratories. During the drill, participants were able to apply one such technology, Stripable Coatings for Radioactively Contaminated Surfaces, in both a subway station and the Philadelphia Fire Department Training Academy's building.

EPA researchers and their partners used Liberty RadEx events to further develop and test a new tool that superimposes contaminant plume maps over Geographical Information System data to estimate the quantities and activity levels of contaminated waste and debris, including buildings, asphalt, and soil. Officials in charge of cleanup and decontamination activities applied these estimates to evaluate trade-offs between decontamination and disposal.

While most training exercises to date have focused on crisis response in the immediate aftermath of a terrorist attack, EPA researchers helped design Liberty RadEx to provide the first major exercise for developing and practicing the critical steps that must take place in the days and weeks after the initial response.

"This exercise was significant because it will help inform how all levels of government, business and community organizations can work together to meet challenges associated with long-term cleanup and community recovery from a dirty bomb attack," said EPA Regional Administrator Shawn M. Garvin. ♦

The original article appeared in EPA's Online Newsletter, "Science Matters" at http://www.epa.gov/ord/sciencenews/science-matters/june2010/scinews_liberty.htm.



**Bringing the CBRN
Defense and Homeland
Security communities
together**

DoD Announces Remaining Eight National Guard HRFs

The Department of Defense (DoD), in collaboration with the states, has selected Massachusetts, New York, Pennsylvania, Georgia, Texas, Missouri, Utah, and California to host the remaining eight homeland response forces (HRFs), which will be established in fiscal 2012. On June 3, 2010, DoD announced Ohio and Washington as the hosts for the first two HRFs, which will be established in fiscal 2011.

The creation of the HRFs is a part of DoD's larger reorganization of its domestic chemical, biological, radiological, nuclear and high yield explosive (CBRNE) consequence management enterprise, initiated during the 2010 Quadrennial Defense Review. This reorganization will ensure DoD has a robust ability to respond rapidly to domestic CBRNE incidents while recognizing the primary role that the governors play in controlling the response to incidents that occur in their states.

The HRF will be distributed across the nation, with one HRF hosted in each of the ten Federal Emergency Management Agency (FEMA) regions. Each HRF will provide a regional response capability of approximately 570 personnel composed of CBRNE specialists, command and control and security forces. HRFs will self-deploy by ground within six to 12 hours of an event, bringing life-saving medical, search and extraction, decontamination, security, and command and control capabilities—this represents a dramatic improvement in response time and life-saving capability to the previous construct.

Coincident with the creation of the eight HRFs in fiscal 2012, the department has selected Puerto Rico, Wisconsin, Louisiana, Kentucky, Nevada, Oregon, and Maine to replace existing CBRNE Enhanced Response Force Packages (CERFP) that will evolve into HRFs. These formations composed of existing National Guard units will be trained to respond to a weapons of mass destruction incident, including: locating and extracting victims from a contaminated environment, performing mass patient/casualty decontamination, and providing medical treatment as necessary to stabilize patients for evacuation. ♦

<http://www.defense.gov/Releases/Release.aspx?ReleaseID=13697>

A Fact Sheet on HRFs and CERFPs can be found at <http://www.defense.gov/news/HRFCERFP.pdf>.

The original press release can be viewed at <http://www.defense.gov/Releases/Release.aspx?ReleaseID=13580>

SMARTMAN: Tests Masks, Saves Lives

By Al Vogel, Public Affairs Specialist, Dugway Proving Ground

He's been a faithful soldier for 10 years. He never hungers, tires, sleeps or complains. He'll never become the subject of a titillating PETA poster. You won't find him filing a lawsuit for exposure to chemical agents, because that's his job—he's SMARTMAN.

The stainless steel Simulant Agent Resistant Test Manikin (SMARTMAN) has two tasks: First, wear protective breathing devices in a specialized chamber, often while exposed to chemical agents such as HD (mustard gas) or GB (nerve agent). Secondly, breathe so testers can determine if the device protects him.

The first SMARTMAN, a cast zinc bust of a human—complete with sampling intakes for nostrils, mouth, one eye and forehead—was created at Dugway more than 10 years ago. It's contained within a square, stainless steel chamber that is placed in yet another chamber during testing, to ensure redundant safety.

In testing, SMARTMAN wears a breathing device while a chemical agent is disseminated in its small chamber. Instruments sample the air inside the mask, drawn from the facial intakes, to determine if a human wearer would be protected. The process sounds deceptively simple, but a variety of scenarios are introduced in each test, to replicate what a human wearer might encounter in actual use.

Dave Rose is the branch chief for West Desert Test Center's (WDTC) Chemical Test Division. A contractor with Jacobs Technology, a contractor that supports WDTC, he uses SMARTMAN at the Combined Chemical Test Facility, more popularly called the chem lab.

Andrew Neafsey, a test officer for WDTC's Chemical Test Division noted that much testing takes place before SMARTMAN ever dons a mask.

"It can be eight to 10 years between the initial concept and full production," Rose said.

Testing any breathing apparatus is a long and complicated process; you don't just build a mask, strap it on SMARTMAN and give it whirl.

First, the materials proposed for the mask are tested, which can be a long process if numerous materials are submitted. Then, a component mask is created from the successful samples, and SMARTMAN wears



The original SMARTMAN, used for testing protective breathing devices, showing instrumentation behind his removable face.



The latest version of SMARTMAN, which is expected to replace the original in a few months.

it in testing. Passing this initial test, SMARTMAN wears the mask with protective ensemble (hood, jacket, etc.), to determine if the combination affects protection.

Next, mask and ensemble are subjected to wear, to replicate typical wear from use, and then tested again. Environmental conditioning follows, exposing the mask and ensemble to heat, cold and high or low humidity. A series of cyclic tests expose the mask and ensemble to at least two of these environments mimicking arctic cold, steamy jungles or scorching desert.

More testing follows—the battlefield contaminant test exposes the mask and ensemble to diesel fuel, hydraulic fluid, camouflage cream, insect repellent and decontaminant.

If it passes all that, it *might* be accepted for production and issue. Rose has used SMARTMAN since its inception. He can recite a long list of the breathing apparatus it's tested. It's how the current M-40 gas mask was tested, and received periodic testing during its production. At Dugway and Edgewood Chemical Biological Center in Maryland, SMARTMAN tested the new Joint Services General Purpose Mask, the M-50, that is replacing the M-40.

Even after a device is approved, SMARTMAN still serves, occasionally doing lot acceptance testing of breathing devices pulled off the production line, to ensure they still meet standards.

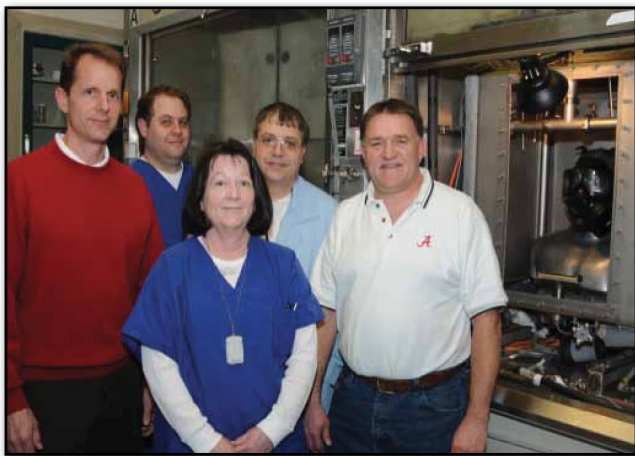
It recently tested the Joint Services Chemical Environment Survivability Mask (JSCESM), designed as an alternative to the M-50.

"The JSCESM is designed to issue to peripheral support personnel," Rose said. "It's a less expensive mask, an escape mask, so they don't have to issue everyone an M-50. It will provide up to 6 hours of protection."

Currently, SMARTMAN is doing the initial and developmental testing of the Joint Services Aircrew Mask, which may not be produced for years.

But the original SMARTMAN is facing retirement; a newer version will take its breath away. Soon, the four original SMARTMAN fixtures at the

Continued pg. 18



The current test team using the original SMARTMAN, some of whom helped develop its replacement. Front, left to right: Andrew Neafsey, Karen Palmer and Dave Rose. Rear: Rich Warby and Jim Haines. The current SMARTMAN is at right, in its chamber, wearing the M-40 gas mask for testing.

chem lab will be replaced with newly built versions, in their improved round chambers. The busts and chamber were designed by Sipex Sun, an engineer in the Instrumentation Branch of WDTC's Test Support Division; Rose, Neafsey and Jim Haines, a chem lab scientist.

Rose, the primary operator and user-scientist of SMARTMAN through the years, provided invaluable oversight during the design of the new version.

"Without Dave, we wouldn't have had hands-on feedback on how to improve the fixture," Neafsey said.

The new chamber is round, rather than square, to create a more consistent airflow when agent is disseminated. A circular airflow distributor is in its floor. Each chamber has an integral liquid-filled coolant jacket to regulate chamber temperature more efficiently.

The new round chamber will potentially use less chemical agent in testing, Neafsey noted, adding that he expects the new design will be utilized by others as the advantages are realized. "The SMARTMAN classic box configuration has worked very well," Neafsey said. "Based upon our modeling, we strive to capture those same attributes in this version, as well as some enhancements."

The new version is better ergonomically designed, easier to decontaminate and will be more compatible with auxiliary equipment such as helmets and headgear, Neafsey noted.

It will take a month or so between the removal of the original SMARTMAN and the installation of the new version. Before the newer SMARTMAN is used, it will undergo validation testing to compare it to the original.

"That's to show the testing community that they function comparably," Neafsey said. "We hope they'll function better."

One thing is certain—given the original SMARTMAN's long, excellent service record, this latest recruit will have a tough act to follow. ♦

This article originally appeared in the February 2010 issue of the Dugway Proving Ground Dispatch. Photos by Al Vogel.



Your one-stop shop for CBRN Defense scientific and technical information resources

Maj. Gen. Robert Dell Orton

Maj. Gen. Robert Dell Orton, of Little Rock, who managed America's chemical and biological weapons and then supervised their destruction, died Wednesday morning [May 5, 2010] at his home in Little Rock [Arkansas]. He was 70.

General Orton had moved to Little Rock with his wife after he retired on July 1, 1997. His work as the Army's chief weapons scientist had often dealt with Arkansas because of the chemical and biological weaponry stored in the state. He directed the demilitarization of the Pine Bluff Arsenal, where a significant share of the nation's chemical and biological munitions once were made and stored.

He was one of the world's foremost authorities on nonconventional weapons and their defense. After President George H.W. Bush and Mikhail Gorbachev, the leader of the Soviet Union, signed a bilateral treaty in 1990 to end chemical weapons production and the adoption of the Chemical Weapons Convention in 1993, it became Orton's job to manage their elimination. He also assisted the Russians and former Soviet states in complying with arms-control measures under the weapons treaty. At his retirement, Orton was the Army's program manager for chemical demilitarization based at Aberdeen Proving Ground in Maryland.

A scientist by training, Orton had not planned a military career after his original stint of duty as a Reserve Officer Training Corps graduate at the University of Texas, but the erection of the Berlin Wall in 1962 caused all lieutenants to be frozen on active duty. The wall did not come down for another 27 years, but Orton had long since committed to an Army career. His assignments took him to Vietnam, Iran and the first Persian Gulf War, where he was chief of chemical operations.

He received the Army Humanitarian Award for managing the evacuation of Americans from Iran after the fall of the Shah in 1979 and before the installation of an anti-American Islamic government. The German government awarded him its highest order for a non-German, the German Federal Armed Forces Gold Cross of Honor, for coordinating the German armed forces' defense against Iraqi chemical and biological weapons during the first Gulf War.

A quiet and deferential man, Orton was not a quintessential warrior. After his promotion to major general in 1992 he said, "it shows that the Army has a sense of humor." As a young bachelor officer stationed at the Indiana Army Ammunition Plant at Charleston in 1979-80, he sponsored a community Brownie troop.

His permanent Arkansas connection was his marriage in 1985 to Sylvia Spencer, a University of Arkansas graduate and former United Press International reporter at Little Rock who at the time was an administrative assistant to U.S. Rep. Beryl Anthony of El Dorado. At Little Rock after his retirement, he was a board member of the MacArthur Museum of Arkansas Military History.

Orton was born October 12, 1939, in Sioux City, Iowa, to Robert A. and Olga Jensen Orton. He grew up in El Paso, Texas and towns along the Mexican border where his father was a U.S. Border Patrol agent. He received a bachelor of arts degree in English and a bachelor of science degree in chemistry from the University of Texas at Austin, a

master of science degree in chemistry from the Rensselaer Polytechnic Institute at Troy, New York, and an advanced management degree from the University of Iowa at Iowa City. He entered the Army expecting to do 18 months of active duty and to finish his commitment in the Reserves, but the Berlin crisis changed his plans.

During the Vietnam War, he was chemical adviser to the Third Vietnamese Corps. Among his assignments were a stint with the Third Armored Division in Germany, professor of chemistry at the U.S. Military Academy at West Point, commander of the Indiana Army Depot, commander of Army chemical activity on Johnston Island in the North Pacific where chemical weapons were tested and stored and later destroyed, program manager for the production of binary chemical munitions, chief of chemical for the Army, and deputy commanding general and then commanding general at the Fort McClellan, Alabama, Army Chemical School.

In his final role as program manager for chemical demilitarization, he structured an acquisition program for the Defense Department to rapidly and safely destroy the world's most lethal non-nuclear weapons. Under his direction, the Pentagon obtained health and environmental permits and contracted for the design, constructing and operating chemical-destruction facilities and he advised eastern-block nations on the implementation of new arms controls.

His awards included the Distinguished Service Medal with Oak Leaf Cluster, Legion of Merit with four Oak Leaf Clusters, Bronze Star Medal, Air Medal, National Defense Medal, Vietnam Service Medal with two Oak Leaf Clusters and the Republic of Vietnam Honor Medal. He was inducted into the Chemical Corps Hall of Fame.

A memorial service was held Wednesday, May 19, 2010 at 10:00 a.m. at Pulaski Heights United Methodist Church to give soldier friends who are in Afghanistan a chance to attend. Burial was at Arlington Cemetery in Arlington, Virginia on Thursday, August 19, 2010 at 1:00 p.m. Memorials should be made to the Walter Reed Society, P.O. Box 59611, Washington DC 20012-9611; the U.S.O., P.O. Box 96860, Washington DC 20077-7677; the Chemical Corp Regimental Association, P.O. Box 437, Fort Leonard Wood, MO 65473; the Methodist Children's Home of Little Rock, or The Methodist Church. Arrangements were under the direction of Ruebel Funeral Home, www.ruebelfuneralhome.com ♦





In the News

UND EERC, U.S. Army Collaborate to Reduce Chemical Weapons Destruction Costs

University of North Dakota Press Release

June 17, 2010

"The University of North Dakota Energy & Environmental Research Center (EERC) in partnership with the U.S. Army Chemical Materials Agency (CMA) and Science Applications International Corporation (SAIC), has demonstrated the effectiveness of a mercury pollution control technology for chemical weapons incinerators."

<http://www2.und.edu/our/news/story.php?id=3138>

NIH-Supported Experimental Marburg Vaccine Prevents Disease Two Days After Infection

NIH News Release

June 16, 2010

"An experimental vaccine developed to prevent outbreaks of Marburg hemorrhagic fever continues to show promise in monkeys as an emergency treatment for accidental exposures to the virus that causes the disease."

<http://www.niaid.nih.gov/news/newsreleases/2010/Pages/experimentalMarburgVax.aspx>

2009 H1N1 Vaccine Protects Against 1918 Influenza Virus, Alleviating Bioterrorism Concerns

The Mount Sinai Medical Center Press Release

June 15, 2010

"Researchers at Mount Sinai School of Medicine have determined people who were vaccinated against the 2009 H1N1 influenza virus may also be protected against the lethal 1918 Spanish influenza virus..."

<http://www.mountsinai.org/about-us/newsroom/press-releases/2009-h1n1-vaccine-protects-against-1918-influenza-virus-alleviating-bioterrorism-concerns>

Army Sensors Research Leads to Soldier Protection Advances

U.S. Army Research Laboratory News Release

June 10, 2010

"Just months after the tragic attacks of September 11, 2001, the U.S. Army Research Laboratory launched an aggressive, innovative research project that has been instrumental to the development of low-cost, lightweight sensors capable of providing novel approaches to the detection of manmade threats to Soldiers, including biological agents, small arms fire, and missile plumes."

<http://www.army.mil/-news/2010/06/10/40663-army-sensors-research-leads-to-soldier-protection-advances/>

CET, LLC Demonstrates Peridox® With EDS for Destroying Anthrax on Urban Terrain at Interagency Biological Restoration Demonstration

CET Press Release

"CET, LLC participated in a bioterrorism recovery exercise...conducted to increase US preparedness to respond/recover from a bioterrorist attack. As part of the event, CET™ demonstrated the utility of Peridox® with EDS (Electrostatic Decontamination System) for destroying Anthrax spores on urban terrain."

<http://cleanearthtech.com/resources/press-releases/june-7-2010/>

Army Researchers Explore Laser Detection Techniques

U.S. Army Research Laboratory News Release

June 4, 2010

"As the need for chemical, biological and explosive detection becomes more relevant in today's world, the U.S. Army Research Laboratory is leading the effort in laser-induced breakdown spectroscopy, which is capable of highly advanced materials analysis."

<http://www.army.mil/-news/2010/06/04/40387-army-researchers-explore-laser-detection-techniques/>

Drug Defeats Deadly Ebola Virus Infection

Andy Coghlan

New Scientist.com

May 28, 2010

"An RNA-based drug has treated an infection of the deadly Ebola virus—the first drug to have been shown to do so in all recipients...Boston University School of Medicine in Massachusetts and colleagues...have designed a small interfering RNA molecule that sabotages three of the virus's vital genes."

<http://www.newscientist.com/article/dn18974-drug-defeats-deadly-ebola-virus-infection.html>

Novel Therapeutic Approach Shows Promise Against Multiple Bacterial Pathogens

NIH News

May 27, 2010

"A team of scientists from government, academia and private industry has developed a novel treatment that protects mice from infection with the bacterium that causes tularemia, a highly infectious disease of rodents, sometimes transmitted to people, and also known as rabbit fever."

<http://www.nih.gov/news/health/may2010/niad-27.htm>

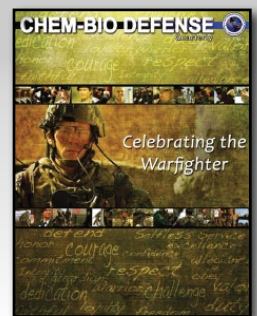
Continued pg. 22

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Presidential Order Balances Security and Scientific Enterprise

By Peter Emanuel, Assistant Director for Chemical and Biological Countermeasures at the White House Office of Science and Technology Policy [OSTP]

Today [July 2, 2010] the President signed an Executive Order that, when implemented by the relevant Departments and agencies, will help the United States achieve a crucial balance between two goals that are sometimes seen as being in conflict: Increasing the Nation's defenses against the threat of biological weapons and reducing the hurdles that legitimate scientists face as they pursue research on potentially dangerous microbes.

This Executive Order is the product of an intensive collaboration that has been going on over the past year under the leadership of OSTP and the National Security Staff. It simplifies and harmonizes a number of earlier efforts to achieve the right balance between the risks and benefits of scientific research on some of the world's most dangerous infectious agents and toxins. It recognizes that access to these materials and the rules for handling them need to be carefully regulated. But it also recognizes that the best way to prepare for an attack involving one of these agents—whether that attack is by an enemy or by Mother Nature—is to know as much as possible about these microbes and toxins in advance.

Today's Executive Order, calls for a number of actions, including creation of a new, tiered, risk-based classification of dangerous biological agents that more precisely defines the degree of research restriction appropriate for each, and better coordination among Federal Departments and agencies that oversee this important Federal research portfolio. It builds and improves upon crucial first steps taken by Congress, including the Antiterrorism and Effective Death Penalty Act of 1996, the USA PATRIOT Act of 2001, and the Bioterrorism Response Act of 2002, which created a framework of policies overseeing a class of dangerous biological entities collectively known as Biological Select Agents and Toxins (often simply referred to as "select agents"). This includes infectious agents such as bacteria and viruses—as well as an array of biologically-based poisons—that have the potential to pose a severe threat to public, animal, or plant health, or to animal or plant products including food. The idea behind these laws is to ensure that personnel handling these agents in research labs and other settings have the appropriate training and skills to handle them safely and securely, and that these agents are handled only in facilities designed to prevent their escape and equipped to ensure their proper disposal.

Over the years, however, this accumulation of legislation and regulation grew increasingly complicated and confusing. In addition to technical questions, there were cultural disconnects. After all, most work on select agents and toxins is unclassified and conducted in university settings that have a long history of openness, collaboration, and resource sharing. The situation for these scientists became even more complex as Federal Departments promulgated management guidance and policies regarding the security of select-agent facilities under their direct control or with whom they had contracts or grants. Some Departments initiated their own oversight and inspection processes independent of the overarching Federal program. Although these changes were well intended, a number of studies in the past 18

months, including a recent interagency review led by the Homeland Security Council, concluded that many of these changes in policies and practices had increased the complexity and raised the costs of compliance without demonstrably reducing the overall risk of theft or misuse.

One telling study, published last year, made very clear the toll this complexity is taking on scientists working in this important field. As part of a survey to assess how effectively select-agent regulations are achieving their goal of protecting public health and national security, Victoria Sutton from the Center for Law and Public Policy at Texas Tech University School of Law asked scientists how stressed they were about the possibility they might inadvertently violate one of the many regulations or rules relating to their work, which could harm their careers or trigger negative consequences for the field. Interestingly, while only 16% of the 198 surveyed scientists reported being moderately or highly stressed about the possibility of injury or death from their work with some of the world's deadliest pathogens, nearly two-thirds of them said they were moderately to highly stressed about the possibility they might unwittingly break a rule!

Today's Executive Order creates a new and more coordinated strategic framework that outlines specific roles, responsibilities, and actions to be taken by Departments and agencies to optimize national security—recognizing that such security requires an appropriate blend of research restrictions and freedoms. The Order also spells out deadlines by which time Federal entities must implement their new policies and practices. Among the strategic framework's major components:

- Creation of both an Interagency Coordination Council and a Federal Experts Advisory Panel to, respectively, coordinate security policies and practices among Federal Departments and agencies that fund work on select agents and advise agency Directors on such topics as physical security and ways of ensuring the reliability of key personnel.
- Tiering and stratification of the select agent list to take better account of individual agents' specific potential to cause mass casualties if deliberately misused, and issuance of new rules and guidances spelling out physical security and personnel reliability practices to be applied at each tier.
- Coordination of Federal oversight and inspections of facilities where work on select agents is underway.

The new Executive Order is a win, both for scientists who have been frustrated as they've sought to study these agents for the public good and for the American people who count on the Federal government to protect them from those who would use these agents to cause harm. As one of many people who spent many months working to get this balance right, I am very happy to see this final product come out over the President's signature. ♦

The original blog post can be found at <http://go.usa.gov/O4j>.

Advanced Life Sciences Announces Restanza™ Shows Efficacy Against Malaria

Advanced Life Sciences Press Release

May 26, 2010

"Advanced Life Sciences Holdings, Inc...announced positive results from *in vitro* and *in vivo* studies assessing the efficacy of Restanza™ (cethromycin), its novel oral antibiotic, against the species of Plasmodium that cause malaria."

<http://ir.advancedlifesciences.com/phoenix.zhtml?c=190126&p=irol-newsArticle&ID=1431262&highlight=>

U.S. Government Stockpiles New, Safer Smallpox Vaccine

Steve Sternberg

USA TODAY

May 25, 2010

"The U.S. government has begun bolstering its smallpox vaccine stockpile with a new version designed to close a gap that left millions vulnerable to a bioterror attack."

http://www.usatoday.com/news/health/2010-05-25-smallpox25_ST_N.htm

Smiths Detection Launches Remote Monitoring Solution for Hazardous Gas and Vapor Identifier

Smiths Detection Press Release

May 19, 2010

"Smiths Detection today launches HGVI LINX™, a pioneering software system to help emergency responders in a central command center view and assess real-time chemical sensor data from deployed Handheld Gas & Vapor Identifier (HGVI) units."

http://www.smithsdetection.com/eng/1025_5359.php

Smiths Detection Launches Portable HazMatID 360 For Advanced Analysis of Unknown Chemicals

Smiths Detection Press Release

May 19, 2010

"Smiths Detection today launches HazMatID 360, the latest version of its portable and rugged HazMatID chemical identification system, providing fast and comprehensive in-field analysis of unknown solids, gels and liquids to emergency responders, military personnel and other users."

http://www.smithsdetection.com/eng/1025_5360.php

Overcoming Anthrax Bacterium's Natural Defenses Could Hold Key to New Treatments

USAMRIID Press Release

May 18, 2010

"Army scientists have discovered a way to 'trick' the bacterium that causes anthrax into shedding its protective covering, making it easier for the body's immune system to mount a defense."

<http://www.usamriid.army.mil/press%20releases/capDnewsrelease.pdf>

A Three-Inch Bio-Detector Quickly Scans for All the Bacteria and Viruses We Know Of, All at Once

Clay Dillow

Popular Science.com

May 6, 2010

"...The Lawrence Livermore Microbial Detection Array (LLMDA) is but a one-inch wide, three-inch long glass slide, but packed in a

checkerboard pattern within the device are 388,000 probes set to detect more than 2,000 viruses and about 900 bacteria."

<http://www.popsoci.com/science/article/2010-05/three-inch-bio-detector-scans-all-bacteria-and-viruses-we-know-all-once>

Breaking Up Can Be Hard

PHYSORG.com

May 5, 2010

"Laura Townsend [University of Vermont] '10 eases a soggy lump of concrete out from what looks like a gigantic pizza oven... 'Our goal is to understand the pore structure of common building materials...with the eventual goal of developing decontamination strategies in case of attack.'"

<http://www.physorg.com/print192301230.html>

NYU-Poly Physicist Collaborates on Detector for Explosives and Chemical Warfare Agents

NYU:poly Press Release

May 4, 2010

"A technology long used for identifying traces of organic compounds in exhaust gases may hold the key to finding minute traces of explosives and chemical warfare agents (CWA) carried into airports or on the clothing of bomb makers..."

<http://www.poly.edu/about/press/releases>

EPA Opens Access to Chemical Information/Searchable Database on Chemical Hazard, Exposure and Toxicity Data Now Available

EPA Press Release

April 29, 2010

"The U.S. Environmental Protection Agency (EPA) is making it easier to find chemical information online. EPA is releasing a database, called ToxRefDB, which allows scientists and the interested public to search and download thousands of toxicity testing results on hundreds of chemicals."

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/43216c4f52d46b0b85257713007c197b!OpenDocument>

Method to Assess Microbial Drug Resistance Chosen as APL's 2009 Innovation of the Year

APL Press Release

April 26, 2010

"A method to quickly determine whether potentially harmful microbes are resistant to certain drugs has been named the year's top invention at The Johns Hopkins University Applied Physics Laboratory."

<http://www.jhuapl.edu/newscenter/pressreleases/2010/100408.asp>

Mercedes Nuclear Lab to Hunt Terrorists at Euro Soccer in 2012

Jonathan Tirone

Bloomberg Businessweek.com

April 23, 2010

"United Nations atomic inspectors are rolling out new radiation-detection tools to foil possible terrorist attacks at the UEFA Euro soccer tournament to be hosted by Poland and Ukraine in 2012."

<http://www.businessweek.com/news/2010-04-23/mercedes-nuclear-lab-to-hunt-terrorists-at-euro-soccer-in-2012.html>

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New CBRNIAC Technical Forum Proceedings

CBRNIAC Forum: Emerging CBRN Defense R&D Requirements

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CR-09-22

\$10.00

September 2009

On September 23, 2009, the CBRNIAC co-hosted a technical forum on "Emerging CBRN Defense R&D Requirements" at the Battelle Eastern Science and Technology (BEST) Center in Aberdeen, Maryland. This final technical forum of FY09 was funded by the Defense Technical Information Center (DTIC) IAC Program Manager as an informal meeting for information sharing, questions and answers,

and collaboration. Co-hosted by the Joint Requirements Office (JRO) for CBRN Defense, the topic was selected by the CBRNIAC Scientific Research Council (SRC) to provide new information on technologies and requirements in CBRN Defense and Homeland Security R&D. Session topics included Detection, Therapeutics, Testing, and Threat. The presentations from 11 speakers are included in the CD.



<https://www.cbrniac.apgea.army.mil/Products/Catalog/Pages/ViewItem.aspx?ID=CR-09-22>

Past CBRNIAC Technical Forum proceedings CDs currently available:



CBRN Scientific Information Collaboration 5 February 2009

<https://www.cbrniac.apgea.army.mil/Products/Catalog/Pages/ViewItem.aspx?ID=CR-09-21>



Trends in CBRN Field Analytics 9 December 2008

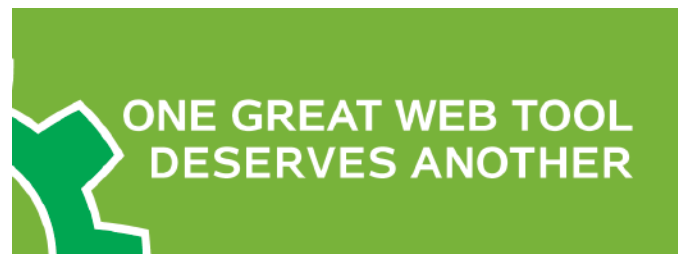
<https://www.cbrniac.apgea.army.mil/Products/Catalog/Pages/ViewItem.aspx?ID=CR-09-20>



The Future of Toxicology in CB Defense 19 June 2008

<https://www.cbrniac.apgea.army.mil/Products/Catalog/Pages/ViewItem.aspx?ID=CR-08-19>

The 31 March 2010 Forum proceedings will be available as a CBRNIAC product in the near future!



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